The following is the one-hour long, plagiarism seminar presented to Columbia University materials science and engineering masters students on October 13, 2015.

This seminar and the author’s other seminars on ethics are available at the author’s web site, http://www.columbia.edu/~iph1/teaching.html. This site also includes a set of mini-case synopses that describe a range of research ethics and professional situations. This site is continually updated.

You are free to use these slides in a seminar presentation, but you may not distribute them in any manner either as is or in any modified form.

Feedback concerning these slides can be directed to me at IPH1@columbia.edu.

- Irving P. Herman, Department of Applied Physics and Applied Mathematics, Columbia University; posted 4-12-16.
Plagiarism 101
What is Plagiarism?
and
Why one must not commit it!

Irving P. Herman

Columbia University
Materials Science Seminar
Tuesday, October 13, 2015
What is Plagiarism?

The following is directly from http://www.plagiarism.org/plagiarism-101/what-is-plagiarism/

ACCORDING TO THE MERRIAM-WEBSTER ONLINE DICTIONARY, TO "PLAGIARIZE" MEANS

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

In other words, plagiarism is an act of fraud. It involves both stealing someone else's work and lying about it afterward.
What is Plagiarism?

The following is directly from http://www.plagiarism.org/plagiarism-101/what-is-plagiarism/

ALL OF THE FOLLOWING ARE CONSIDERED PLAGIARISM:

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority (or much) of your work, whether you give credit or not
What can happen when you plagiarize as a student?

You could get an F on the paper and your instructor could average this into your final grade, so you end up with a C or D.

You could get an F on the paper and your instructor could give you an F for the course.

You could get expelled.
Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


Term Paper

Graphene is the strongest material ever tested, with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).
Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


Graphene is thought to be the strongest material ever tested. It has an intrinsic tensile strength of 130 GPa and a Young's modulus of 1 TPa (150,000,000 psi).
Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


Term Paper

“Graphene is the strongest material ever tested, with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi)”. 
Plagiarism?

**Source:** http://en.wikipedia.org/wiki/Graphene

Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


**Term Paper**

Graphene is the strongest material ever tested, with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).¹

Plagiarism?

Source:  http://en.wikipedia.org/wiki/Graphene

Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


Term Paper

“Graphene is the strongest material ever tested, with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi)”.

Graphene is the strongest material ever tested,[125] with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi).[126]


Term Paper

“Graphene is the strongest material ever tested,¹ with an intrinsic Tensile strength of 130 GPa and a Young's modulus (stiffness) of 1 TPa (150,000,000 psi”).²,³

Plagiarism?

Three Different Sources
Graphene may revolutionize many technologies.\textsuperscript{71}
Graphene is the strongest material ever tested.\textsuperscript{72}
Graphene may make electronics much faster.\textsuperscript{73}

71. Ref. X
72. Ref. Y.
73. Ref. Z.

Term Paper
Graphene may revolutionize many technologies.\textsuperscript{1} Graphene is the strongest material ever tested.\textsuperscript{2} Graphene may make electronics much faster.\textsuperscript{3}

1. Ref. X
2. Ref. Y.
3. Ref. Z.
Plagiarism?

Three Different Sources
Graphene may revolutionize many technologies.  
Graphene is the strongest material ever tested.  
Graphene may make electronics much faster.

71. Ref. X
72. Ref. Y.
73. Ref. Z.

Term Paper
“Graphene may revolutionize many technologies”. 1  “Graphene is the strongest material ever tested”. 2  “Graphene may make electronics much faster”. 3

1. Ref. X
2. Ref. Y.
3. Ref. Z.
Plagiarism?

Three Different Sources
Graphene may revolutionize many technologies.\textsuperscript{71}
Graphene is the strongest material ever tested.\textsuperscript{72}
Graphene may make electronics much faster.\textsuperscript{73}

71. Ref. X
72. Ref. Y.
73. Ref. Z.

Term Paper
Graphene may revolutionize many technologies\textsuperscript{1} because it is the strongest material ever tested\textsuperscript{2} and may make electronics much faster.\textsuperscript{3}

1. Ref. X
2. Ref. Y.
3. Ref. Z.
The Plagiarism Spectrum
(roughly ranked in terms of severity of intent, but all are bad and forbidden)

The following is essentially directly from

1. **Clone**: Submitting another’s work, word-for-word, as one’s own

2. **Copy**: Contains significant portions of text from a single source without alterations

3. **Find-Replace**: Changing key words and phrases but retaining the essential content of the source

4. **Remix**: Paraphrases from multiple sources, made to fit together

5. **Recycle**: Borrows generously from the writer’s previous work without citation (self-plagiarism)
The Plagiarism Spectrum (continued)  
(roughly ranked in terms of severity of intent, but all are bad and forbidden)

The following is essentially directly from http://www.plagiarism.org/plagiarism-101/types-of-plagiarism/

6. Hybrid: Combines perfectly cited sources with copied passages without citation

7. Mashup: Mixes copied material from multiple sources

8. Citation errors: Includes citations to non-existent or inaccurate information about sources

9. Aggregator: Includes proper citation to sources but the paper contains almost no original work

10. Retweet: Includes proper citation, but relies too closely on the text’s original wording and/or structure
Underlying “Reasons” for Unethical Actions

- Good old-fashioned greed
- Rewards could outweigh the risks
  - especially if not caught
  - not wrong if not caught
  - my family comes first
- Easier and faster to cut corners (skip work, copy, plagiarize, cheat)
- Easier to ask for forgiveness than permission
- All’s fair in love, war, and my work
  - want to get ahead at all costs
- Special circumstances for a given case
  - more important than ethics in this case
- Organizational pressures
- Ignorance of the ethical, moral or legal standards

Maybe before, but NOT after this seminar!
Plagiarism (Columbia sources)

http://www.college.columbia.edu/academics/dishonesty-plagiarism

http://library.columbia.edu/subject-guides/social-sciences/plagiarism.html

http://gsas.columbia.edu/academic-integrity

http://www.college.columbia.edu/faculty/resourcesforinstructors/academicintegrity/plagiarism

http://bulletin.engineering.columbia.edu/policy-conduct-and-discipline

http://www.columbia.edu/cu/compliance/docs/training/Responsible_Conduct_of_Research/
Plagiarism (Columbia instances)


http://www.nytimes.com/2008/06/24/nyregion/24columbia.html?_r=0
What happens when you plagiarize?
http://gsas.columbia.edu/content/disciplinary-procedures#violations

III. SANCTIONS
The following sanctions may result for both academic and behavioral misconduct:

Disciplinary Warning: The student is warned that any additional violations of Columbia policies may result in more serious disciplinary action. A disciplinary warning is the minimum sanction assigned to a student found responsible for violating University policy.

Disciplinary Probation: The student’s behavior is deemed inappropriate for the community and the student is warned that further violation of University policies during the probation will likely result in more serious disciplinary action.

Disciplinary Suspension: The student is removed temporarily from the University, usually for a period of a semester or a year, with any conditions for return made clear at the time of the suspension. Academic privileges are also suspended during this time.

Expulsion: The student is removed permanently from the University and his or her student status is terminated.

Additional Sanctions that may also be imposed are: restitution or restitution services, compensatory services, rehabilitation and/or educational activities, exclusion from community activities such as Commencement, or exclusion from entry into the residence halls, specific campus buildings, or campus in general.

The following additional sanction may result for academic misconduct:
A notation on the student’s permanent academic record specifying the sanction and indicating that the sanction is a result of academic misconduct.
Excuses Don’t Work

“I could never write as well as the source I copied, and I wanted to submit the best paper possible”.

Not valid at all!

Your purpose here is to learn and develop skills, and to show that you have done so. We don’t want to see someone else’s good work. We want to see yours!
Professional Ethics – IEEE Code of Ethics

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

1. to accept responsibility in making decisions consistent with the safety, health, and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;
2. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
3. to be honest and realistic in stating claims or estimates based on available data;
4. to reject bribery in all its forms;
5. to improve the understanding of technology; its appropriate application, and potential consequences;
6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;
7. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;
8. to treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;
9. to avoid injuring others, their property, reputation, or employment by false or malicious action;
10. to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

http://www.ieee.org/about/corporate/governance/p7-8.html
Specific Examples of Plagiarism

Using or adapting the introduction of another paper or proposal.

Using or adapting the experimental section of another paper or proposal, changing the details (materials, processing conditions and so on).

Using the uncited work of others, including quotes, in technical and nontechnical talks

Re-using your own work.

Self-plagiarism (submitting work for one course that already has been used for another course)---professionally with papers and here for term papers
Plagiarism (discussed copying text, now figures)?


Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Your power point presentation
Photoluminescence in CdSe Quantum Dots

by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Your power point presentation from G. N. Jones, APL 404, 3100 (1999)
Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Fig. 8. The photoluminescence of CdSe quantum dots as a function of size.

Plagiarism?


Photoluminescence in CdSe Quantum Dots

by G. N. Jones

Your term paper
Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Fig. 8. The photoluminescence of CdSe quantum dots as a function of size.\(^\text{12}\)

References
Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Your journal publication

Fig. 8. The photoluminescence of CdSe quantum dots as a function of size.
Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Fig. 8. The photoluminescence of CdSe quantum dots as a function of size.

References
Plagiarism?


Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Fig. 8. The photoluminescence of CdSe quantum dots as a function of size.12 (Used with the permission of the author and publisher.)

References
Photoluminescence in CdSe Quantum Dots
by G. N. Jones

Fig. 2. The photoluminescence of CdSe quantum dots as a function of size.

Fig. 8. Comparison of the photoluminescence of CdSe quantum dots in our experiment (open squares) and theory with the data of Ref. 12 (filled squares), as a function of size.

References
NSF Audit of Successful Proposals Finds Numerous Cases of Alleged Plagiarism

by Jeffrey Mervis on 8 March 2013,

The National Science Foundation (NSF) is investigating nearly 100 cases of suspected plagiarism drawn from a single year's worth of proposals funded by the agency.

... that applying plagiarism software to NSF's entire portfolio of some 8000 awards made that year resulted in a "hit rate" of 1% to 1.5%. "My group is now swamped," he says about his staff of six investigators.

Plagiarism is one of three categories, along with fabrication and falsification, recognized as research misconduct by federal research agencies. (NSF labels the latter two categories "problematic data.

...... "substantive allegations of misconduct associated with NSF proposals and awards ... has more than tripled in the past 10 years, as has the number of findings of research misconduct." She said her office has issued 120 findings of research misconduct since 2003, and that "more than 80%" involved plagiarism.”

http://news.sciencemag.org/scienceinsider/2013/03/nsf-audit-of-successful-proposal.html
Case Summary: Karnik, Pratima
DEPARTMENT OF HEALTH AND HUMAN SERVICES
Office of the Secretary
Findings of Research Misconduct
http://ori.hhs.gov/content/case-summary-karnik-pratima

- Pratima Karnik, Ph.D., Case Western Reserve University, ... Assistant Professor, Department of Dermatology, ... engaged in research misconduct in research submitted to the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), National Institutes of Health (NIH), in grant application R01 AR062378.

- ORI found that the Respondent engaged in research misconduct by plagiarizing significant portions from research grant application R21 AR061881 that she had reviewed for NIAMS, NIH, and inserting that text into her submitted grant application R01 AR062378-01. Respondent also plagiarized significant portions of text from (eight) scientific articles and one U.S. patent application available on the Internet.

- Dr. Karnik has entered into a Voluntary Settlement Agreement and has voluntarily agreed for a period of two (2) years, beginning on July 22, 2013:
  (1) To have her research supervised; ... to ensure the scientific integrity of her research contribution ...
  (2) That any institution employing her shall submit ..., a certification to ORI that the content is free of plagiarized material, ..... 
  (3) To exclude herself voluntarily from serving in any advisory capacity to PHS ...

Retraction Watch: Inadvertent Self-Plagiarism:
Oh, the irony: Paper on “Ethics and Integrity of the Publishing Process” retracted for duplication

“In a case whose irony is not lost on those involved, an article about publishing ethics has been retracted because one of the authors re-used material he’d written for an earlier piece. But the authors and the journal’s editors have turned the episode into a learning opportunity.”

- Here’s the notice for “Ethics and Integrity of the Publishing Process: Myths, Facts, and a Roadmap,” published in 2011 by Marshall Schminke and Maureen L. Ambrose: The above article from Management and Organization Review, published online 7 SEP 2011, has been retracted by agreement between the authors, the journal’s outgoing Editor-in-Chief Anne Tsui, the journal’s incoming Editor-in-Chief Arie Y. Lewin, and John Wiley & Sons Asia Pty Ltd. The retraction has been agreed due to unattributed overlap with work previously published in Academy of Management Review, 34(4): 586–591:...

- According to the editorial, the problems in the paper were noticed by a doctoral students in management taking a class on research ethics. The professor teaching that course notified the journal on November 12, 2013 ...
Self-Plagiarism

A scientist wonders if he/she can use a figure from one of his/her papers in another paper, properly referencing it, without it violating copyright laws and without it being considered self-plagiarism. What should he/she do?

A scientist wonders if he/she can use text from one of his/her papers, properly referencing it, in a “perspectives” commentary/review article, without it being considered self-plagiarism. What should he/she do?
Plagiarism

I. A journal editor notices that large chunks of introductory and background material in a submitted manuscript seems to have been lifted from an article published by somebody else. What should he/she do?

II. A journal editor notices that a submitted manuscript seems to have the same format and structure as one from an article published by somebody else, but with words changed to reflect the topic of this article. What should he/she do?

III. A professor on a thesis defense committee notices that a large part of the introduction to a thesis is very similar to or identical to sections he/she has read in papers. What should he/she do?

IV. A professor reading a student term paper in a course learns that an on-line search shows that “much” of it is the same as material available on-line. What should he/she do?
Is this Plagiarism?

“The image on the right was a Nature cover from 2002. On the left, there is an image from the SI (supporting information) of a subsequent Nature paper (2009) by a different group (no authors in common), that looks identical. The latter paper does site the former one, but, is this plagiarism?”


This was submitted for your consideration by a member of APAM.
Columbia Spectator fires editor who plagiarized from New York Times article

by Andrew Beaujon
Published Sep. 7, 2012 7:54 am
Updated Sep. 7, 2012 6:38 pm


”An article by Jade Bonacolata in the Columbia Spectator plagiarized a New York Times writer’s work, Peter Jacobs reports. Some of the plagiarism is clumsy rewriting of a Robin Pogrebin article; there’s one outright lift of a quote.”

“[W]e have retracted this story after verifying that at least three paragraphs were largely identical to those in the New York Times piece,” an editor’s note that replaces Bonacolata’s piece says. “We will be reviewing the writer’s other work and will update readers as we know more.””
Columbia University Valedictorian Plagiarizes Patton Oswalt
May 25, 2010
By LIZ HERON


“... Comedian Patton Oswalt .... has apparently busted two plagiarists in the last few weeks, the latest a Columbia University valedictorian. In a tweet this afternoon, Oswalt offered less-than-heartfelt congratulations to graduating Columbia student Brian Corman and linked to a video of Corman's "great speech," which seemed closely to mirror 2006 material from Oswalt's stand-up act. Oswalt, a writer/actor best known for his roles in the sitcom "King of Queens" and the 2007 film "Ratatouille", tweeted, "Congrats to Columbia University valedictorian Brian Corman! Great speech," and linked to video of Corman's May 16 valedictory speech at Columbia's School of General Studies Class Day.”

“In his commencement speech, Corman told an anecdote about taking a physics class with "Star Trek" aficionados that bore more than a passing resemblance to Patton's "physics for poets" joke, seen here in 2006.”

"It has come to our attention that a portion of our Valedictorian's remarks at this year's School of General Studies Class Day was taken from a comedy routine by Patton Oswalt. As an institution of higher learning that places a core value on respect for the works of others, we were surprised and disappointed to have learned of this matter today. Columbia University and the School of General Studies do not condone or permit the use of someone else's work without proper citation. The student speaker has appropriately issued an apology to his classmates and to Mr. Oswalt for failing to provide such attribution.”
“We are terminating Madonna Constantine’s employment with Teachers College for cause ...” The investigation into the plagiarism charges was conducted by the law firm Hughes Hubbard & Reed, which found “numerous instances in which she used others’ work without attribution in papers she published in academic journals over the past five years,” according to a statement from Teachers College.

In a move that surprised even college insiders, Columbia Teachers College has fired controversial professor Madonna Constantine, the Voice has learned. Constantine, a prominent member of the counseling psychology department, ... was accused of repeated plagiarism by a former colleague and two former students. In a letter issued today, college officials say they were accepting the findings of an outside law firm, which concluded Constantine had lifted work from her accusers. They also concluded that Constantine acted to obstruct the investigation. The outside law firm concluded that Constantine, who had been with the college since 1998, had lifted some 36 passages from the work of former TC professor Christine Yeh, and former students Tracey Juliao and Karen Cort. “It’s kind of unprecedented to fire a tenured professor,” a college insider says. The people who leveled the plagiarism charges said justice had been served.
U.S. Senator Accused of Plagiarism

*Senator’s Thesis Turns Out to Be Remix of Others’ Works, Uncited*
John Walsh, Democrat, Confronts Questions of Plagiarism


By JONATHAN MARTIN JULY 23, 2014 New York Times

- On the campaign trail this year, Mr. Walsh, 53, has made his military service a main selling point. ...

- But one of the highest-profile credentials of Mr. Walsh’s 33-year military career appears to have been improperly attained. An examination of the final paper required for Mr. Walsh’s master’s degree from the United States Army War College indicates the senator appropriated at least a quarter of his thesis on American Middle East policy from other authors’ works, with no attribution.

- About a third of his paper consists of material either identical to or extremely similar to passages in other sources, such as the Carnegie or Harvard papers, and is presented without attribution. Another third is attributed to sources through footnotes, but uses other authors’ exact — or almost exact — language without quotation marks.

**Senator Quits Montana Race After Charge of Plagiarism**


By JONATHAN MARTIN AUG. 7, 2014 New York Times
The president of Malone University, a small liberal-arts institution in Canton, Ohio, announced his resignation on Monday after concerns surfaced that he had used unattributed materials in some of his speeches.

Mr. Streit began the speech with a description of the Roman figure Janus: "In Roman mythology, Janus was the god of gates, of doors, of beginnings and of endings. His most prominent remnant in modern culture is his namesake, the month of January, which begins each new year. He is most often depicted as having two faces or heads, facing in opposite directions."

The Wikipedia entry for Janus reads: "In Roman mythology, Janus (or Ianus; "archway") was the god of gates, doors, doorways, beginnings and endings. His most prominent remnant in modern culture is his namesake, the month of January, which begins the new year. He is most often depicted as having two faces or heads, facing in opposite directions."

In a speech Mr. Streit gave while provost at Olivet Nazarene, he described the history of the word “provost” in language that strongly resembles a definition on the University of Iowa’s Web page. Mr. Streit said: “Unfortunately, the original definition of the word ‘provost’ was 'the keeper of the keys of the prison.' The Provost Marshal of the Norman invaders who plundered England in 1066 was infamous for torture and merciless cruelty, and suspected deserters and drunks during the American Revolution were very poorly treated in their respective ‘provost prisons.’”

The University of Iowa page states: “Unfortunately, the original definition of the word ‘provost’ was ‘keeper of a prison.’ The Provost Marshal of the Norman invaders in 1066 was infamous for torture and merciless cruelty. And suspected deserters and drunks during the American Revolution were very poorly treated in their respective ‘provost prisons.’"
Lunch